WO 2005/094183 PCT/IL2005/000079

What is claimed is:

1. A method for converting vocal sounds into digital data format, said method comprising the steps of:

- amplifying and filtering the analog electrical signal of received vocal sound;
- comparing the analog electrical signal to pre-defined values by a comparator;
- sampling by clock the output signal of the comparator,
- representing the sampled signal by digital data, which includes the vocal sounds harmonics.
- 2. The method of claim 1 further comprising the step of storing said digital data.
- 3. The method of claim 1 wherein the vocal sounds are reconstructed from the stored digital data by applying the following steps:
 - filtering the alternating analog signal which represents the stored digital data for reducing the signal higher harmonics;
 - amplifying the filtered signals;
 - tranducing the electrical amplifying signals to vocal sound signal.
- The method of claim 1 wherein the alternating signal is being sampled by clock edge according to Nyquist theorem.
- The method of claim 1 wherein the vocal sounds are received from external memory sources, wherein said source stores a pre-recorded vocal sound on digital media.

WO 2005/094183 PCT/IL2005/000079

6. A system for converting vocal sounds into digital data format, wherein the vocal sound signals are converted into electrical signal by the microphone, said system comprised of:

- amplifying and filtering module for analyzing the electrical signals;
- a comparator module for comparing the analog signal to predefined value;
- sampling by clock edge module for representing the output signal of the comparator as a digital data format;
- 7. The system of claim 6 further comprising memory module for storing said digital data.
- 8. The system of claim 6 further enabling to reconstruct the vocal sounds from the stored digital data, comprised of the following reconstructing modules:
 - filtering module for reducing the higher harmonics of the alternating analog which represents the stored digital data;
 - amplifying module increasing the filtered signals amplitude;
 - transducer module for converting the electrical amplified signals
 into vocal sound signal
- 9. The system of claim 6 wherein the alternating signal is being sampled by clock edge according to Nyquist theorem.
- 10. The system of claim 6 wherein the system modules are integrated into single device.

WO 2005/094183 PCT/IL2005/000079

11. The system of claim 8 wherein the system reconstruction modules are integrated into a separate device.

- 12. The system of claim 6 wherein the vocal sounds are received from external memory sources, wherein said source stores a pre-recorded vocal sound on digital media.
- 13. The system of claim 6 wherein the system modules are software modules.

17